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10/642,835

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Yuk Cheung Au

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EXAMINER

ALIE, GHASSEM

ART UNIT

PAPER NUMBER

3724

MAIL DATE

DELIVERY MODE

01/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-----------------|--------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/642,835 | AU ET AL. | |
| | Examiner | Art Unit | |
| | Ghassem Alie | 3724 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/20/07.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Comment

1. Applicant's argues that the finality of the Office action mailed on 09/21/07 should be withdrawn in light of a new ground of rejection. Applicant's argues while Bruck was mentioned in the Office action, the rejection of claims 3-4 was not based on Bruck. As stated in Final Office action, the patent to Bruck (4,716,069) was inadvertently omitted in a rejection heading between paragraph 3 and the paragraph below paragraph 3 in the first Office action mailed on 03/27/07. It would have been clearly evident to one of ordinary skill in the art upon reading the body of the rejection that the application of Bruck was fully intended and, therefore, does not constitute a new ground of rejection. Bruck was applied in the body of the rejection. In this case, simply adding Bruck, which was applied to the body of the rejection, to the rejection heading does not constitute a new ground of rejection. Therefore, the finality of the Office action mailed on 09/21/07 should not be withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

a person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewis (4,579,027). Regarding claim 1, Lewis teaches an apparatus 21 capable for indexing a length of film 23 for severance. Lewis also teaches that the apparatus 21 includes a linear feeding device 71 operative to hold the film 23 and to feed a predetermined amount of film 23 to a

trimming device 26 moving linearly between an initial position and another position towards the trimming device. Lewis also teaches a film holder 74 that is operable between a first position, wherein a gap is provided for the film 23 to pass through during the feeding to the trimming device, and a second position wherein the gap is closed so that a whole width of the film 23 is clamped by the film holder 74 at a cutting line extending transversely of the film feed direction, wherein film is served by the trimming device 26 at the cutting line. See Figs. 1-6 in Lewis.

Regarding claim 21, Lewis teaches everything noted above including that an edge of the film holder is substantially aligned with the trimming device 26 at a position where the trimming device serves the film.

Claim Rejections-- 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al. (2,657,926), hereinafter Price, in view of Lewis (4,579,027). Regarding claim 1, Price teaches an apparatus for indexing a length of film 17 for severance. Price also teaches that the apparatus includes a linear feeding device 20 operative to hold the film 17 and to feed a predetermined amount of film 17 to a trimming device 52 by moving linearly between an initial position and another position towards the trimming device 52. Price also teaches that the film support is a film holder 70 that is operable between a first position, wherein a

gap is provided for the film 70 to pass through during the feeding to the trimming device 52, and a second position. Price also teaches that the film holder 70 is operable to a second position for clamping the film 17 along the length of a line extending transversely of the film 17 feed direction and along which the trimming device 52 serves the film. See Figs. 1-3 and col. col. 3, lines 14-73 in Price.

Price does not teach explicitly that the film holder 70 is located between the linear feeding device and the trimming device on the in-feed side of the trimming device; and a whole width of the film is clamped by the film holder at a cutting line extending transversely of the film feed direction, wherein film is served by the trimming device at the cutting line. However, Lewis teaches a film holder 74 that is operable between a first position, wherein a gap is provided for the film 23 to pass through during the feeding to a trimming device 26, and a second position wherein the gap is closed so that a whole width of the film 23 is clamped by the film holder 74 at a cutting line extending transversely of the film feed direction, wherein film is served by the trimming device 26 at the cutting line. See Figs. 1-6 in Lewis. It should be noted that Price's apparatus functions the same whether the film holder is positioned between the linear feed device and the trimming device upstream of the trimming device of the apparatus or the film holder located on the downstream of the trimming device of the apparatus, since in both locations film holder functions the same and clamps the film when the film is severed by the trimming device. Therefore, it would have been obvious to a person of ordinary skill in the art to provide Price's apparatus with the film holder and trimming device arrangement, as taught by Lewis, in order to clamp the whole width of the film at the cutting line and produce a clean cut.

Regarding claim 21, Price, as modified above teaches everything noted above including that an edge of the film holder 74 is substantially aligned with the trimming device 26 at a position where the trimming device serves the film 23. See Figs. 1-6 in Lewis.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Lewis, as applied to claim 1, and in further view of Friberg et al. (3,813,974), hereinafter Friberg. Regarding claim 2, Price, as modified above, teaches everything noted above except that the linear feeder has a vacuum head coupled to a vacuum suction device. However, the use of vacuum head for displacing or moving a product is well known in the art such as taught by Friberg. Friberg teaches a vacuum head 8 for feeding a material 1 forward towards a cutter 12. See Fig. 1-4 and col. 2, lines 31-69 in Friberg. It would have been obvious to a person of ordinary skill in the art to replace the gripping head in Price's cutting apparatus, as modified by above, with the vacuum head as taught by Friberg, since Friberg's gripping head as an alternative for gripping material and moving the material forward functions the same as Price's gripping head.

7. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Lewis and Friberg, as applied to claim 2, and in further view of Bruck (4,716,069). Regarding claim 3, Price, as modified above, teaches everything noted above except that the head is changeable for different types of film. However, the use of different support surface for contacting film material or the like is well known in the art such as taught by Bruck (4,716,069). Bruck teaches that a contacting surface for the roller 8 which includes a suitable non-stick surface such as polytetrafluoroethylene. Bruck also teaches that support surface of the roller 9 is covered with cork or hard rubber. The roller 8 contacts high-density

polyethylene film material 2 and the roller 9 contacts a low-density polyethylene film material. Therefore, different support surface are used for different types of film. The vacuum head in Friberg is removable and could be replaced. Therefore, a new vacuum head or vacuum head with different support surface could be used for a different type of film, since Bruck teaches that different support surfaces could be used with different types of film. Therefore, it would have been obvious to a person of ordinary skill in the art to provide Price' cutting apparatus, as modified above, with a different support surface or a different vacuum head having a specific support surface for contacting a specific type of film, as taught by Bruck, in order to ensure that the feeding device has a suitable support surface for the specific type of film engage with the feeding device.

Regarding claim 4, Price, as modified above, does not explicitly teach that the surface of the linear feeding device that contacting the film is made from material that has low static generation with the film. As stated, above, Bruck teaches a contacting surface for the roller 8 which includes a suitable non-stick surface such as polytetrafluoroethylene. Bruck also teaches that support surface of the roller 9 is covered with cork or hard rubber. See Figs. 1-2 and col. 4, lines 29-52 in Bruck. Therefore, it would have been obvious to a person of ordinary skill in the art to provide Price's cutting apparatus, as modified above, with a low static material support surface for the feeding device, as taught by Bruck, in order to ensure that the film does not stick to the linear feeding device and facilitate the operation of the linear feeding device.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Lewis, as applied to claim 1, and in further view of Igarashi (2002/0039119). Regarding

claim 5, Price, as modified by above, teaches everything noted above except a linear encoder coupled to the linear feeding device for determining the position of the linear feeding device. However, the use of encoder with a carriage for a feeder is well known in the art such as taught by Igarashi. Igarashi teaches a linear encoder 9 coupled to a linear carriage 3 for determining the position of the carriage. See Fig. 1 and page 1, paragraphs 3-6 in Igarashi. It would have been obvious to a person of ordinary skill in the art to provide the feeding device in Price's cutting apparatus, as modified by above, with the linear encoder, as taught by Igarashi, in order to determine the position of the feeding device.

9. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Lewis, as applied to claim 1, and in further view of Rosenthal (2,214,478) and Ando et al. (2002/0057912), hereinafter Ando. Regarding claim 6, Price teaches everything noted above including a film reel 102 for supplying the length of film. Price, as modified by Lewis, does not teach sensors positioned adjacent to the film reel operative to activate the film reel to release film at particular position of the film with respect to the sensors, whereby a loop is maintainable between the film reel and the surface supporting the film for indexing. However, Rosenthal teaches a film reel 4 for supplying film and a loop, which is maintained between the film reel and a surface for supporting the film. See Figs. 1-4 and col. 1, lines 45-55 and col. 2, lines 1-14 in Rosenthal. It would have been obvious to a person of ordinary skill in the art to provide the film in Price's cutting device, as modified by above, with the loop as taught by Rosenthal in order to eliminate the need of supplying power for pulling the film from the reel by the feeding mechanism. Price in view of Lewis and Rosenthal does not teach that the sensors maintain the loop on the film. However, the use of sensors to maintain

the loop on the film is well known in the art such as taught by Ando. Ando teaches loop sensor 112 for sensing the loop portion 108 of the film. See Figs. 3-6 and page 10, paragraphs 108-111 in Ando. It would have been obvious to a person of ordinary skill in the art to provide Price's cutting device, as modified above, with one or more loop sensors as taught by Ando in order to maintain the loop on the film.

Regarding claim 7, Price, as modified by above, teaches everything noted above including one or more rollers 7 situated between the film reel 4 and the linear feeding device to bring the film substantially level with the surface supporting the film. See Fig. 1 in Rosenthal.

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Lewis, as applied to claim 1, and in further view of Von Hofe et al. (3,756,899), hereinafter Hofe. Regarding claim 8, Price teaches everything noted above except a collecting reel to which a baking cover peeled off from the film is coupled, for collecting backing cover peeled off from the film during indexing. However, the use of collecting reel for collecting a baking cover of a film or the like is well known in the art such as taught by Hofe. Hofe teaches a collecting reel 66 for collecting the backing cover of the film L. See Fig. 2B and col. 5, lines 24-62 in Hofe. It would have been obvious to a person of ordinary skill in the art provide Price's cutting device, as modified by above, with the collecting reel as taught by Hofe in order to collect the backing cover of the film.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Lewis, and Hofe, as applied to claim 8, and in further view of Moisio (6,297,882).

Regarding claim 9, Price, as modified by above, does not teach sensors adjacent the backing

cover that are operative to sense a distance from the backing cover to the collecting sensors and initiate driving of the collecting reel for collecting backing cover from the film at a predetermined distance of the backing cover to the collecting sensors. However, the use of sensor located at fixed at a predetermined distances from a roll of film or web to initiate driving the roll of film and paper is well known in the art such as taught by Moisio. Moisio teaches sensors 4, 4', 4" adjacent a backing cover 2 that are operative to sense a distance from the backing cover to the collecting sensors and initiate driving of the collecting reel for collecting backing cover from the film at a predetermined distance of the backing cover to the collecting sensors. See Figs. 1-4 and col. 3, lines 5-65 in Mosios. It would have been obvious to a person of ordinary skill in the art to provide Price's cutting device, as modified above, with the sensors as taught by Moisio in order to measure the size of the roll of collecting reel and determined when it has to be replaced.

12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Lewis, as applied to claim 1, and in further view of Nam et al. (2002/0109217), hereinafter Nam. Regarding claim 10, Price, as modified above, teaches everything noted above except a pick up device movable between the trimming device and a placement position and an optical device positioned under the pick-up device for inspecting a piece of film on the pick-up device. Nam teaches a pick up device 52 movable between the trimming device 48 and a placement position 66. Se Fig. 4 in Nam. It would have been obvious to a person of ordinary skill in the art provide Price's cutting device, as modified above, with the picking device as taught by Nam in order to pick up the to apply the film on the workpiece. Price, as modified above, does not teach an optical device to inspect a piece of film.

However, Official notice is taken that the use of optical devices for inspection of the cut pieces are well known in the art such as is evident in Thomson et al. (5,046,389).

13. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view Lewis, as applied to claim 1, and in further view of Dueck (6,647,872). Regarding claims 11 and 12, Price, as modified above, teaches everything noted above except a sensor to detecting a presence of a length of film. However, the used of sensors to detect end-of-film or workpiece and the use a sensor for detecting a presence of a length of film or workpiece are well known in the art such as taught by Dueck. Dueck teaches a sensor for detecting the presence of workpiece. See Col. 2, lines 10-20 in Dueck. It would have been obvious to a person of ordinary skill in the art provide Price's cutting device, as modified above, with the sensor as taught by Dueck in order to detect the presence of the film.

14. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Lewis, as modified in claim 1, and in further view of Yamaguchi et al. (5,239,904), hereinafter Yamaguchi. Price, as modified above, teaches everything noted above except a sensor for detecting end-of-film on and initiating an action to stop feeding film to the trimming device. However, the used of sensors to detect end-of-film or workpiece and the use a sensor for detecting a presence of a length of film or workpiece are well known in the art such as taught by Yamaguchi. Yamaguchi teaches a sensor E for detecting end-of-film on and initiating an action to stop feeding film to the trimming device. See col. 12, lines 1-25 in Yamaguchi. It would have been obvious to a person of ordinary skill in the art provide Price's cutting device, as modified above, with the sensor as taught by Yamaguchi in order to detect the leading end of the film.

Response to Amendment

15. Applicant's arguments with respect to claims 1-12 and 21 have been considered but are moot in view of the new ground(s) of rejection. It should be noted that the new ground of rejection is necessitated by applicant's amendment to claim 1.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure..

Bradley (3,648,552), Greve et al. (5,072,640), Raffel (1,085,356), Von Arx (3,656,391), Reichental et al. (5,072,637), Rovigo (4,313,781) teach a cutting apparatus including a holder clamping a whole width of a workpiece.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at

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866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Ghassem Alie". The signature is written in a cursive style with a large, stylized 'G' and 'A'.

Ghassem Alie
Patent Examiner
Art Unit 3724

GA

January 22, 2008